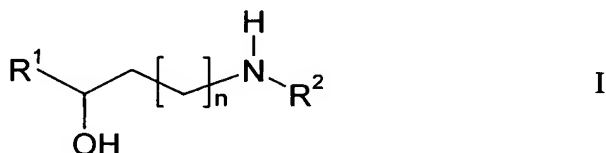


This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) Process for the enantioselective preparation of amino alcohols of the formula I



in which

R^1 denotes a saturated, unsaturated or aromatic carbocyclic or heterocyclic radical which is unsubstituted or mono- or polysubstituted by R^3 and/or R^4 ,

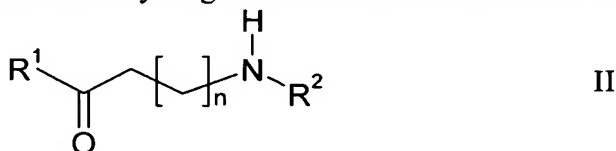
R^2 denotes alkyl having 1-20 C atoms or H,

R^3, R^4 each, independently of one another, denote H, alkyl or alkoxy having 1-20 C atoms, aryl, aryloxy or COOR^2 , F, Cl, Br, OH, CN, NO_2 , $\text{N}(\text{R}^2)_2$ or NHCOR_2

and

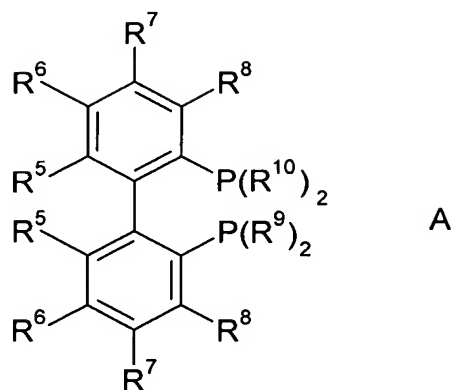
n denotes 0, 1, 2 or 3,

by enantioselective hydrogenation of amino ketones of the formula II



in which

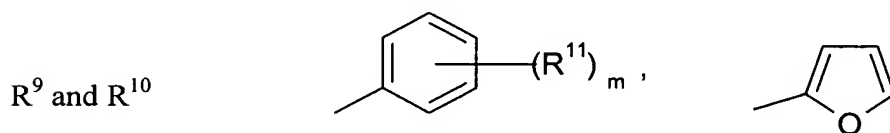
R^1, R^2 and n have the meaning indicated above, in the presence of a non-racemic catalyst, characterised in that the catalyst is a transition-metal complex in which the transition metal is complexed to a chiral diphosphine ligand A



in which

R^5 , R^6 , R^7 and R^8 each, independently of one another, denote H, alkyl or alkoxy having 1-20 C atoms, aryl, aryloxy or F, Cl, Br, $N(R^2)_2$ or $NHCOR_2$

each, independently of one another, denote



or cyclohexyl

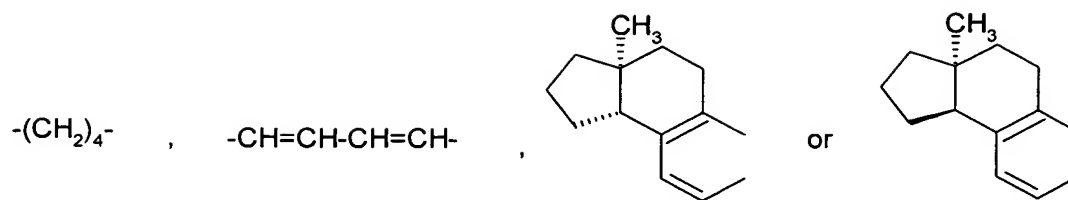
R^{11} denotes H, alkyl or alkoxy having 1-20 C atoms, aryl, aryloxy or SO_3Na , $COOR^{12}$, F, Cl, $N(R^{12})_2$ or $NHCOR^{12}$,

R^{12} denotes alkyl having 1-20 C atoms or H

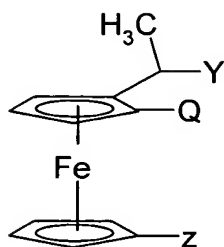
and

m denotes 0, 1, 2 or 3,

where R^5 and R^6 , R^6 and R^7 and R^7 and R^8 together can also have the meaning



or B



B

in which

Y denotes OH, P(cyclohexyl)₂, P(3,5-dimethylphenyl)₂ or P(C(CH₃)₃)₂,

Z denotes H or P(phenyl)₂,

Q denotes PPh₂, P(cyclohexyl)₂, P[3,5-bis(trifluoromethyl)phenyl]₂, P(4-methoxy-3,5-dimethylphenyl)₂ or P(C(CH₃)₃)₂

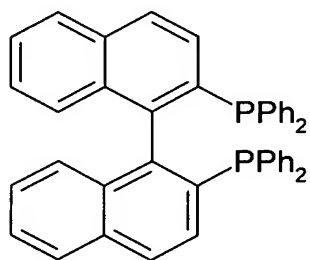
and

Ph denotes phenyl, o-, m- or p-methylphenyl or dimethylphenyl.

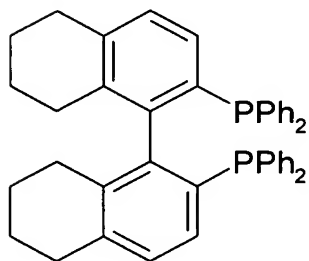
2. (Original) Process according to Claim 1, in which R¹ denotes phenyl or 2-thienyl.
3. (Currently Amended) Process according to Claim 1 ~~or 2~~, in which R² denotes methyl, ethyl, n-propyl or isopropyl.
4. (Currently Amended) Process according to ~~one or more of Claims 1 to 3~~ Claim 1, in which n denotes 1.
5. (Original) Process according to Claim 1 for the preparation of (S)-3-methylamino-1-phenyl-1-propanol or (S)-3-methylamino-1-(2-thienyl)-1-propanol or acid-addition salts thereof.
6. (Currently Amended) Process for the preparation of compounds of the formula I according to ~~one or more of Claims 1 to 5~~ Claim 1, characterised in that the chiral, non-racemic catalyst is a transition-metal complex containing one or more

metals or salts thereof selected from the group consisting of rhodium, iridium, ruthenium and palladium.

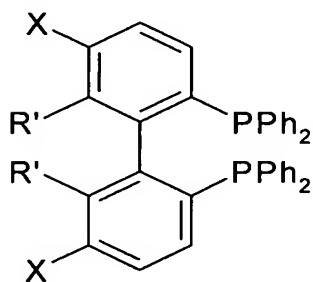
7. (Currently Amended) Process for the preparation of compounds of the formula I according to ~~one or more of Claims 1 to 6~~ Claim 1, characterised in that the chiral, non-racemic catalyst is a transition-metal complex containing rhodium or salts thereof.
8. (Currently Amended) Process according to ~~one or more of the preceding claims~~ Claim 1, characterised in that the chiral diphosphine ligand used is a compound of the formula A1 to A5:



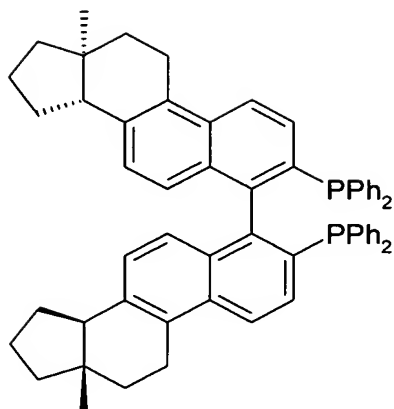
A1



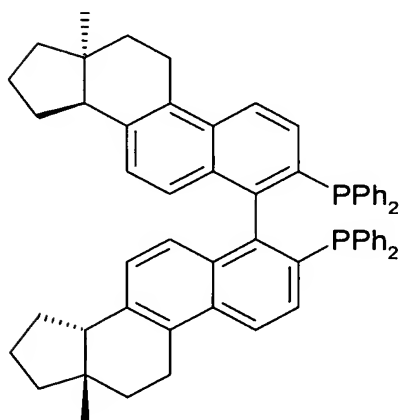
A2



A3



A4



A5

in which Ph has the meaning indicated in Claim 1, and X denotes H, alkyl, O(alkyl), Cl, or F, and R' denotes alkyl O(alkyl) or F.

9. (Currently Amended) Process according to Claim 7 ~~or 8~~, characterised in that the chiral diphosphine ligand used is (S)-(-)-2,2'bis(di-p-tolylphosphino)-1,1'-binaphthyl or (S)-(-)-2,2'bis(diphenylphosphino)-1,1'-binaphthyl.
10. (Currently Amended) Process for the preparation of compounds of the formula I according to ~~one or more of Claims 1 to 9~~ Claim 1, characterised in that the reaction temperature is between 0 and 200°C.
11. (Currently Amended) Process for the preparation of compounds of the formula I according to ~~one or more of Claims 1 to 10~~ Claim 1, characterised in that the catalyst/ substrate ratio is between 1:5000 and 1:50.

12. (Currently Amended) Process for the preparation of compounds of the formula I according to ~~one or more of Claims 1 to 11~~ Claim 1, characterised in that the hydrogenation is carried out under 1-200 bar of hydrogen.
13. (Currently Amended) Process for the preparation of compounds of the formula I according to ~~one or more of Claims 1 to 12~~ Claim 1, characterised in that the hydrogenation is carried out in the presence of an alcohol.
14. (Currently Amended) Process for the preparation of compounds of the formula I according to ~~one or more of the preceding claims~~ Claim 1, characterised in that the chiral, non-racemic catalyst is a transition-metal complex containing sulfate, chloride, bromide, iodide, PF₆, BF₄, methanesulfonate, toluenesulfonate, hexachloroantimonate, hexafluoroantimonate or trifluoromethanesulfonate as anion.